



# Ada Lovelace Day 2020

## ATOMIC POEMS

Ada Lovelace Day is an international celebration of the achievements of women in Science, Technology, Engineering, Art and Maths (STEAM). We're celebrating the day by exploring the amazing *Atomic Poems* written by Margaret Cavendish in the 1650s.

Join us to write a short piece of text inspired by Margaret Cavendish and themed around her time at Bolsover Castle. Then try your hand at our online Fibonacci Poetry Generator to turn your words into a unique piece of coded poetry. For more info about Margaret Cavendish and Fibonacci Poetry go to [www.thisgirl.codes](http://www.thisgirl.codes).

Everybody can take part, so don't worry if you haven't done any coding before - we've created a step-by-step guide for you to follow!

### Step 1:

Launch the online Poetry Generator from [this link here](#).

### Step 2:

Click on the 'Expand' button first. You don't need an account to take part.

```
1- def fibonacci(n):
2-     if n == 1 :
3-         return 1
4-     elif n == 2 :
5-         return 1
6-     else :
7-         return (fibonacci(n-1) + fibonacci(n-2))
8-
9- def printpoem(poem):
10-    poemtoprint = poem
11-    splitPoem = poemtoprint.split()
12-    line = 1
13-    startword = 0
14-    endword = 0
15-
16-    while endword < len(splitPoem):
17-        currentlineLength = fibonacci(line)
18-        endword = endword + currentlineLength
19-        thisline = splitPoem[startword:endword]
20-        thislinetoprint = ' '.join(thisline)
21-        print(thislinetoprint)
22-        line = line + 1
23-        startword = startword + currentlineLength
24-
25- printpoem("Small Atomes of themselves a World may make, As being subtle, ar
```

Result

Powered by trinket

Small  
Atomes  
of themselves  
of themselves  
a World may  
make, As being subtle, and  
of every shape:And as they dance about, fit  
places finde, Such Formes as best agree,  
make every kinde.

Click the 'Expand' button here

Expand



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## Step 3:

Now it's time to make this poem your own. Delete the red text that we've added from Margaret Cavendish's poem and type in your own words. You'll need to keep the quotation marks for your code to work

```
1- def fibonacci(n):
2-     if n == 1 :
3-         return 1
4-     elif n == 2 :
5-         return 1
6-     else :
7-         return (fibonacci(n-1) + fibonacci(n-2))
8-
9- def printpoem(poem):
10-    poemtoprint = poem
11-    splitPoem = poemtoprint.split()
12-    line = 1
13-    startword = 0
14-    endword = 0
15-
16-    while endword < len(splitPoem):
17-        currentlinelength = fibonacci(line)
18-        endword = endword + currentlinelength
19-        thisline = splitPoem[startword:endword]
20-        thislinetoprint = ' '.join(thisline)
21-        print(thislinetoprint)
22-        line = line + 1
23-        startword = startword + currentlinelength
24-
25- printpoem("Small Atomes of themselves a World may make, As being subtle, and
```

Result

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Small  
Atomes  
of themselves  
a World may  
make, As being subtle, and  
of every shape:And as they dance about, fit  
places finde, Such Formes as best agree,  
make every kinde.

Now delete these words and add your own. Remember to keep the quotation marks.

"remember"

## Step 4:

Time to generate your poem!  
Run your code and you'll see your poem appear in the box on the right hand side.

```
1- def fibonacci(n):
2-     if n == 1 :
3-         return 1
4-     elif n == 2 :
5-         return 1
6-     else :
7-         return (fibonacci(n-1) + fibonacci(n-2))
8-
9- def printpoem(poem):
10-    poemtoprint = poem
11-    splitPoem = poemtoprint.split()
12-    line = 1
13-    startword = 0
14-    endword = 0
15-
16-    while endword < len(splitPoem):
17-        currentlinelength = fibonacci(line)
18-        endword = endword + currentlinelength
19-        thisline = splitPoem[startword:endword]
20-        thislinetoprint = ' '.join(thisline)
21-        print(thislinetoprint)
22-        line = line + 1
23-        startword = startword + currentlinelength
24-
25- printpoem("Atomes will dance, and measures keep just time; And one by one will hold round circle line,
```

Result

Powered by trinket

Atomes  
will  
dance, and  
measures keep just  
time; And one by one  
will hold round circle line,

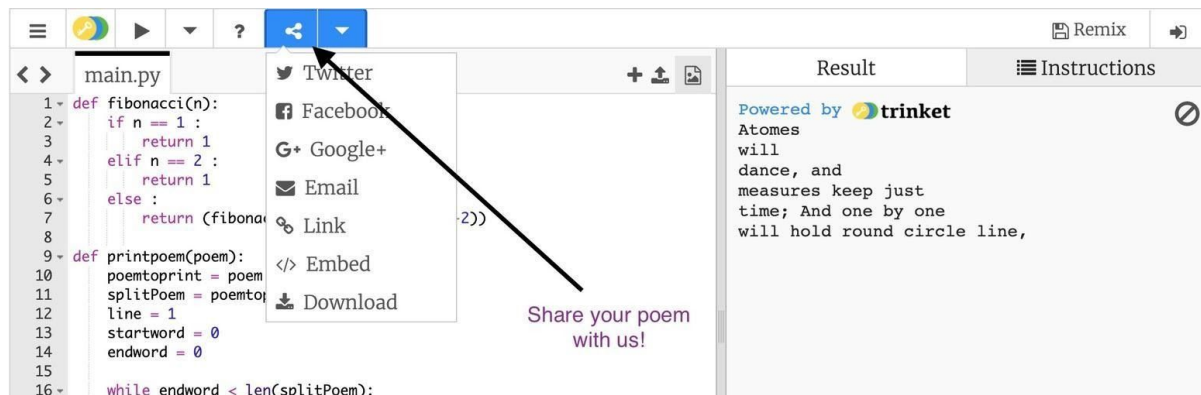
When you've changed the words, click on this arrow button to run your code



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Finally!

Share your poem with us on social media using [#atomicpoems](#) or email it to [info@junctionarts.org](mailto:info@junctionarts.org). Happy coding!



When you share your final piece we'll turn your poems into delicate 3D sculptures and projections by artist Cora Glasser, which will be installed at Bolsover Castle in early November 2020. The artworks will also be showcased, along with your poems, on the [www.thisgirl.codes](http://www.thisgirl.codes) website.